A PEDIATRIC TREATMENT CLINIC IN A HEALTH DEPARTMENT*

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IT is our firm conviction in the New York City Department of Health that the well-child conference must provide integrated, high-quality, family-centered services—both preventive and curative—to meet the needs and demands of the clientele. Let me explain how we came to that conviction.

Although the traditional well-child conference is designed primarily to provide preventive services and to refer children with health disorders to hospitals or private treatment facilities, our group found that 39 per cent of all infants and young children examined in child-health stations or well-baby clinics had one or more adverse health conditions requiring further medical investigation and/or treatment.[1] It is obvious that the traditional scope is too modest; it does not meet the actual needs of children, particularly in the lower socioeconomic groups where the need for comprehensive (preventive, curative, family-centered) services is very great indeed.

In the city of New York the first such comprehensive service to care for children both in health and in disease was established in 1946 at Bellevue Hospital. The facility is jointly operated by the hospital and the Department of Health. Children receive preventive and curative services in the same manner as they would be cared for by a family physician. A child who reports for well-care and who is found to have an acute or chronic illness is treated promptly at the joint child health station. This is preferred to referring him elsewhere, which would result in a loss of time and an inconvenience. A unified record, including the child-health medical record as well as the pediatric clinic record, is utilized Four such joint preventive and curative facilities are in operation in the city.

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Genesis of a Pediatric Treatment Clinic

By the end of the 1950's an accelerated demand for outpatient medical services alarmingly outdistanced the supply. Inadequate pediatric services in the low socioeconomic areas have been of particular concern. These overcrowded and congested areas are incapable, for a variety of reasons, of providing prompt and adequate treatment to children in need of medical care.

An explosive situation developed in one area in Brooklyn that involved the Kings County Hospital Children's Receiving Ward, which is essentially an emergency ambulatory clinic for sick children. The patient caseload was increasing at an accelerated rate: about 10,000 visits annually at an increment rate of 13 per cent. Approximately 450 children had to be examined in a 24-hour period.

In December 1961 Dr. Jonathan Lanman, head of the Department of Pediatrics in the Downstate Medical Center and director of the pediatric service at Kings County Hospital brought the implications of the situation to the attention of the Commissioners of Health and Hospitals. The rising census of pediatric ambulatory patients, which had overtaxed the available staff and facilities, was going to increase still further. This dire prediction came true. By the end of 1962 the increment rate for that year was more than 20 per cent, and the number of visits increased from 86,316 in 1961 to 106,715 in 1962, a 50 per cent higher increment rate than in previous years.

The commissioners requested Dr. Rustin McIntosh, then Senior Consultant in Pediatrics to the Department of Health, to head a special committee to investigate the problem and make recommendations. This special committee found the Children's Receiving Ward a bedlam of inconvenience and overcrowding.[2]

The ward is located on the 10th floor of the pediatric building with access by two very slow, overcrowded elevators. Waiting-room facilities were totally inadequate: patients and parents had to occupy benches in corridors; often parents had to stand with sick children in their arms wherever they could find room. Patient waiting-time was 4 to 5 hours. The risk of cross-infection was obviously very great. "In the examining rooms, one bed or examining table is assigned to one family. Since many of the parents bring more than one child, as many as 10 individuals may be awaiting an examination in one room. There is much noise and crying going on, interfering markedly with good patient-care."[3]

Because the long waiting time could not be reduced, a nurse would sponge patients with high temperatures while they awaited examination.

In addition to deplorable physical facilities, there was an inadequate professional staff. The interne and resident staff assigned to this facility had inadequate pediatric training and experience; there was only limited opportunity for supervision from the senior attending staff. Furthermore, there was inadequate graduate nurse and nursing aid coverage and virtually no social service.

The Committee made a series of recommendations, including: 1) opening ancillary facilities for pediatric care in other parts of Brooklyn to relieve the excessive load at the Children's Receiving Ward; 2) strict districting of patients; 3) greater utilization of existing services in voluntary and municipal hospitals; 4) expansion of current physical facilities; and 5) increasing the clinical staff and taking other internal remediable measures.

As a result of further studies by the Committee, it was ascertained that only a few of the existing hospitals could accept even a handful of patients daily. It was felt that even if all of the voluntary hospitals in the area absorbed as many additional pediatric patients as their facilities would permit, it would not modify the trend significantly. In spite of long waiting hours, unattractive surroundings, inconveniences, and other deterrents, the demand for services would continue to increase. Apparently the pediatric "emergency" service has been substituting for the general practitioner and family physician in this and other areas.

Although the changes brought about at Kings County Hospital, such as increased staff and improvement in facilities, were very helpful, they were only palliative. Because it was felt that bold and drastic action was needed, there was unanimous agreement that the best solution would be to shift the patient load at its source.

A critical analysis of the Children's Receiving Ward caseload revealed that 36 per cent came from the Bedford-Stuyvesant district, a higher proportion than from any other area. The Brownsville area contributed the second largest number of patients, 26 per cent of the total. Since all efforts to redistribute the caseload to other treatment facilities in Brooklyn failed, the only practical alternative left was to establish at once an additional treatment facility in the area of greatest need, i.e., in the Bedford-Stuyvesant District Health Center, one of 30 centers operated by the Department of Health.

Assuming that the entire caseload from the Bedford-Stuyvesant district now served at Kings County Hospital would be absorbed by the proposed Health Department treatment clinic, it was estimated that a maximum of 100 patients would be served daily. It was estimated that a physician would see, on the average, about four patients per hour and that three physicians would need to be at the clinic at all times while it was in operation. The original plan to have a voluntary hospital provide the necessary medical staffing failed to materialize, and the Department of Health had to assume the responsibility for complete staffing of the proposed clinic, which was to serve about 12,000 individual children and receive approximately 36,000 visits annually.

By the end of October 1962, the Commissioner of Health submitted an emergency budget to the Mayor to cover the cost of operations of the clinic. It was designed to be a comprehensive, self-contained treatment unit including medical, nursing, laboratory, social service, and limited x-ray facilities. The cost of this service was estimated to be $250,000, approximately $6.00 per patient visit. The Mayor and the Board of Estimate promptly approved this budgetary request and on November 15, 1962, the Bedford Pediatric Treatment Clinic opened its doors to patients in need of ambulatory care.

The Bedford Pediatric Treatment Clinic

The clinic cooperates closely with the Department of Hospitals, particularly with the Kings County Hospital, which provides the ambulance service and the prepackaged medications dispensed to patients as indicated by the attending physician's prescriptions. When a patient requires hospitalization, he is in most cases referred to the Kings County Hospital inpatient service.

The clinic is located on the first floor of the Health Center adjacent to the Child Health Station. It is spacious, well-lighted, and airy. It includes a large waiting room and four examining rooms, each with windows to the outside, a nurse conference room, a consultation room, and a director's office. Only one patient is admitted to the examination room at a time, and there is ample space and time for physician and nurse to confer with parents. Every parent is counseled and alerted on the importance of well-child supervision. When it is determined that a child is not receiving well-child supervision, he is immediately registered at the child health station and his mother receives an appointment to

the station before she leaves the clinic. All children under supervision in the child health station who are found to have a health disorder are promptly seen at the treatment clinic, which is almost next door.

The staff is multidisciplinary. It includes about 40 part-time practicing physicians working on a per-session basis, all of whom have had some training in pediatrics, and a consultant pediatrician in charge. The District Health Officer is responsible for the administration of the clinic. The professional staff also includes public health nurses, public health assistants, practical nurses, and registered nurses working on a per-session basis. The District Supervising Nurse provides nursing consultant guidance and is on call as needed. Several laboratory technicians and an x-ray technician are available also. A full-time social worker is available as well as a consultant from the Bureau of Nutrition and a health educator. Waiting time is reduced to a minimum and patients are received courteously and treated promptly on an individual basis. Cross-infection is eliminated.

The public health nurse has a conference with the parent before and after the child is examined by the attending physician. An inquiry is made of any health or social problems in the family and every attempt is made to help in resolving such family problems. In contrast to hospital-based outpatient clinics, this treatment facility is not episodic disease-oriented; the emphasis is on the individual and the impact the disease condition may have on the patient and family. We are not solely concerned with the treatment of the disease condition, but with Johnny Jones, who happens to be ill.

Characteristics of the District and the People

Bedford-Stuyvesant is located just north of the center of Brooklyn. The houses are chiefly 3- and 5-story brownstone walk-up apartments built at the turn of the century. They are now delapidated and in disrepair. The district has a population of 286,764 (1960 census), the great majority of whom are nonwhites; many are recent arrivals from the south. More than 79 per cent of all live births in 1963 were to nonwhites, as compared with a city-wide average of 24 per cent. The per cent of premature births is 15, as compared with a city average of 9.9. More than 73 per cent of all live births are delivered in ward services; the city-wide average is 43 per cent. Forty-five per cent of pregnant women received late or no prenatal care; the city-wide average is 23.5

per cent. The neonatal, postnatal, infant, and perinatal mortality rates are among the highest in the city. As a matter of fact, for the first four months in 1964, this district had the dubious distinction of having the highest infant mortality rate, outstripping even central Harlem. The rate in Bedford is 47.0 deaths per 1,000 live births, the highest rate in the city; the city-wide rate is 29.0 per 1,000 live births. The percentage of out-of-wedlock births was 24, as compared with a city-wide average of 11 per cent. In short, all factors that influence infant mortality and morbidity adversely were high in this district.

In addition to the vital statistics listed above, other serious health conditions prevail in this district in higher proportion than in the rest of the city. The venereal disease rate, tuberculosis rate, and the incidence of lead poisoning are much higher. It has the second highest juvenile delinquency rate in the city. A large proportion of the high school-age youth are not enrolled in school. Unemployment of young adults is the highest in the city. Seventy-five per cent of the nonwhites in the district are in the very lowest socioeconomic group.

The characteristics of the families at the Bedford treatment clinic were analyzed and the following estimates were made. These estimates are based on a random sample of 350 families. In ethnic composition more than 90 per cent are Negro. Seventeen per cent of the families are on welfare, and 72 per cent of the families earn less than $4,000 annually. The average number of individuals in a household was more than four. A totally unexpected finding was the relatively high educational level among the families served: more than 40 per cent of the parents stated that they completed high school and 2 per cent indicated that they completed a college education. Their occupations varied from unskilled labor to professional work. The large majority was in the laboring class.

The clinic professional staff has often remarked about the attitude of the clientele, who were characterized as polite, grateful for services provided, well-disciplined. Children were well dressed and neat in appearance. Mothers have remarked that they look forward to visiting the clinic and they have been observed leaving the clinic with a smile.

Clinic Findings

The Bedford Pediatric Clinic operates 365 days a year from 9 a.m. to 5 p.m. The reason for not operating this clinic 24 hours a day is that

64 per cent of the cases at the Kings County Childrens Ward were seen between the hours of 8 a.m. and 4 p.m.; an additional 26 per cent reported between 4 p.m. and midnight. The hours of the clinic will be extended in accordance with the need. There is no means test and no fee is charged for any service or medication; the only limiting factor is age. Age is limited from birth to 15 years. During the first 15 months of clinic operation, more than 40,500 visits were recorded and more than 15,000 individual children were served.

An average of 20 minutes is devoted by the examining physician to a health examination. This does not include the time spent by the nurse or the social worker in a parent conference, or the time required for laboratory determinations, home follow-up when indicated, or the like.

It may be helpful to include a brief analysis of a typical month's work program (April 1964). More than 3,200 visits were made to the clinic and 2,623 individual children were seen, of whom more than 1,100 were seen for the first time. Seventy-two per cent of the children were under six years of age and 51 per cent were under three years of age. Only 14 per cent were 10 years old or older.

The diagnostic entities observed were legion, with respiratory infections and skin and allergy conditions contributing 71 per cent of the total. Fifty-six per cent of the children examined had a respiratory infection. Table I gives a breakdown of diagnostic conditions found by major groupings for the month of April 1964. It is of interest that though the clinic was first proclaimed as an "emergency" clinic, traumatic injuries contribute less than 5 per cent of the total.

The laboratory work-up is done at the physician's request. It includes a complete blood count and differential, smears for sickle cell anemia, x rays of skull and bones, urinalysis, tine testing, and smears for ova and parasites. It is very gratifying that such tests are done promptly at the time of the patient's visit; the results are made known to the examining physician before he concludes the examination, thus permitting immediate and effective treatment. Patients requiring more extensive laboratory tests are referred to the Kings County Hospital and a complete report is sent to the Pediatric Treatment Clinic without delay.

Approximately 80 per cent of the patients seen require and receive some medication at the clinic. In about 6 per cent it is not reported whether patient was given medication.

TABLE I.

Diagnosis	*Number**	*Per cent***
1) Respiratory	1,811	55.6
2) Skin, eczema, allergy (exclusive of asthma)	491	15.1
3) Communicable disease	245	7.5
4) Gastrointestinal	213	6.5
5) Nutritional deficiency, anemia	145	4.5
6) Trauma	85	2.6
7) Ophthalmologic	73	2.2
8) Asthma	50	1.5
9) Other	374	11.5
10) Normal child, no diagnosis	85	2.6
11) Not reported	108	3.3

* Multiple diagnosis occurred in several cases.
** Percentage of total visits (3,258).

REFERRAL AND FOLLOW-UP PROCEDURES

Thirty-five per cent of the patients seen were requested to revisit the clinic; another 44 per cent were asked to revisit if necessary. About 10 per cent of children seen were referred to the child health station for well-child supervision, and some school-age children were referred to the public health nurse in their schools. Less than 6 per cent of the children examined had to be referred to specialty clinics for further diagnostic care and/or treatment. About 1 per cent of the children examined are referred to an inpatient service for possible hospitalization and only about half of those are actually hospitalized. Referrals for hospitalization are mainly for surgical procedures, such as hernias or suspected acute abdominal conditions.

Whenever a patient is referred to another treatment facility, the public health nurse in charge of the Bedford Pediatric Treatment Clinic calls the facility concerned to ascertain whether the parent actually reported with the patient. If the patient failed to carry out the instructions, the family is immediately contacted by phone, post card, or home visit to determine the cause and to motivate the parent to keep the necessary appointment.

If a family fails to return for a scheduled revisit to the clinic, the public health nurse contacts the family and gives a new appointment date. If no response is obtained, a home visit is made. A recent inquiry was made into the effectiveness of the follow-up procedures. It was reported that only in some instances do patients fail to keep original appointments; the response to post cards is excellent and patients appear very grateful for interest shown in their welfare.

In addition to medical problems, help is provided to families through the social service consultant on many sociological problems, such as housing, referrals to the Department of Welfare, nutritional guidance, and referral to community agencies. In short, the emphasis at this treatment clinic is *not* on the disease condition alone, but on the total health needs of the child.

Summary

The Bedford Treatment Clinic is a new, exciting, and dramatic dimension in Health Department-operated Maternal and Child Health Services. The notion that a Health Department should provide only preventive and diagnostic services and should not engage in therapeutic services is archaic and impractical. The rewards in the area of teaching alone would justify this conclusion.[4]

The opportunities for teaching undergraduate and graduate students of medicine, public health, and nursing are unlimited. The clinic affords a golden opportunity for teaching internes, residents, and attending medical staff comprehensive ambulatory care.[5,6,7] The traditional emergency clinic is hardly a favorable environment for such training, which should be done in an environment devoid of pressure and urgency.[8] As a matter of fact, the Bedford Clinic is constantly used to orient residents in preventive medicine, staff physicians and nurses, postgraduate students from schools of public health, and maternal and child health workers and administrators from many parts of the United States and from abroad.

Opportunities for research in medical care are unlimited also and constant evaluation is now being made of the effectiveness of the various programs and procedures. There is also ample opportunity for clinical research.

The local county medical societies are to be congratulated for cooperating fully in helping the Department of Health obtain the services of practicing physicians. This demonstration project has gained the endorsement of the public health community; no one has yet questioned whether a treatment clinic is a rightful function of a health department, for health is indivisible and includes preventive and curative services.

A modern health department must be constantly on the alert and do everything possible to improve medical care. Comprehensive ambu-

latory medical care is an important phase of preventive medicine and we feel that a pediatric treatment clinic is a logical extension of the Well-Child Conference. The Bedford Treatment Clinic provides a high quality of comprehensive outpatient care and, above all, a humane, personal approach with attention to each individual's needs. We feel that this service bridges the gap between health and disease; it is an excellent device for early discovery of adverse health conditions and prompt treatment, thus reducing significantly chronic illness and costly hospitalization.

Health departments, particularly in urban areas, must be attuned to the changing needs of a changing population and ready to provide for any unmet health needs of the community. New approaches must be utilized and new methods explored to provide health services to low socioeconomic groups in slum areas. The Bedford Pediatric Clinic is but one of many possible approaches and techniques.

In closing I wish to express thanks to Dr. I. Starin, Assistant Commissioner for Community Health Services; to Dr. Samuel Minnowitz, Bureau Director of Health for Brooklyn; to Miss Grace McFadden, Director of Public Health Nursing; to Dr. Alexander Roubelev, District Health Officer; and to all the public health nurses and the staff physicans who have given so much time and effort to making this facility a reality.

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